

From: Leithead, Cheyenne <Cheyenne.Leithead@WestonSolutions.com>
Sent: Wednesday, September 20, 2017 8:54 AM
To: Mason, Steve
Cc: Foster, Althea
Subject: RE: M6H1 HARVEY RESPONSE 09-20-2017 0700 FINAL
Attachments: Hurricane Harvey Chronology.xlsx

Team,

Updated chronology report is attached. Please let me know if you have any questions.

Thank you,

Cheyenne Leithead

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From: Mason, Steve [mailto:mason.steve@epa.gov]
Sent: Wednesday, September 20, 2017 7:52 AM
To: Leithead, Cheyenne
Subject: FW: M6H1 HARVEY RESPONSE 09-20-2017 0700 FINAL

With Regards, Steve



From: R6HarveySITL
Sent: Wednesday, September 20, 2017 7:22 AM
To: Eoc, Epahq <Eoc.Epahq@epa.gov>
Subject: M6H1 HARVEY RESPONSE 09-20-2017 0700 FINAL

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Region 6: Hurricane Harvey Chronology	
Date: August 17, 2017	Event: Hurricane Harvey
For complete list of MAs / IAGs / Action Request Forms, see additional file	
Thur, Aug 17	Tropical Storm Harvey is named
Sat, Aug 19	Harvey is downgraded to a tropical depression; winds at 35 mph
Wed, Aug 23	Harvey is downgraded to a tropical wave
Thur, Aug 24	Harvey regenerated into tropical depression (535 miles southeast of Port O'Connor, TX); 35 mph winds
Fri, Aug 25	Harvey becomes a hurricane with max. sustained winds of 85 mph (325 miles southeast of Port O'Connor)
MA: 01-00	By midnight, Harvey is a category 2 hurricane (220 miles from Port O'Connor); winds at 100 mph
	Activate EPA to Texas EOC and the RRCC to support FEMA response operations (\$15,000)
	Harvey is upgraded to a category 3 hurricane; winds of 120 mph; 75 miles southeast of Corpus Christi
	Harvey is a Category 4 storm; 130 mph winds and is 45 miles from land
Sat, Aug 26	Harvey makes landfall as a Category 4 hurricane; eye of storm comes ashore between Port Aransas and Port O'Connor
MA: 01-00	Deploy EPA to various locations, including but not limited to Texas EOC and the Denton RRCC to support response operations (\$20,000)
	Harvey is centered "15 miles inland; Downgraded to a Category 3; winds of 115 mph
	Harvey is downgraded to a Category 2 hurricane
Sun, Aug 27	Harvey is downgraded to a Category 1 storm; 90 mph winds; Forecasters warn of potentially catastrophic flooding in the coming days
Mon, Aug 28	Harvey stationed himself over the Houston area; extreme flooding and over 50 in. of rain in some areas
MA: 02-00	Families are rescued from their homes due to rapidly rising waters
MA: 03-00	Activate EPA to NRCC to support FEMA response operations (\$10,000)
Tue, Aug 29	Requested ESF-10 assistance to the State of Texas in support of assessment and response operations to actual or threatened hazardous materials and oil releases/discharge (\$8,592,000)
Wed, Aug 30	More neighborhoods are flooded after the Addicks Reservoir is open due to threats of it breaking from large amounts of water
MA: 03-01	Fort Bend and Brazoria county under mandatory evacuation as the Brazos river due to severe threats and flooding
Fri, Sept 1	Alcoa/Lavaca Bay; Jones Road GW Plume; North Cavalcade Street; Sikes Disposal Pit; Sol Lynn; South Cavalcade Street; D.L. Mud; Gulf Coast Vacuum Services; Mallard Bay landing Bulk Plant; PAB Oil & Chemical Service NPL Sites completed
MA: 02-01	Amendment #1: Amend to change projected end date to 9/30/2017 and OFA Action Officer to Steve Mason. No change in funding (\$8,592,000)
	Water begins to recede in Houston, TX and clean up efforts began
	Brine Service; Crystal Chemical Co.; Falcon Refinery; Star Lake Canal;
MA: 02-01	Amendment #1: Extend end to 9/11/2017. Increase funding by \$40,000 (cumulative \$50,000)
	Four No Action Assurance (NAA) letters were signed by EPA to help address fuel shortages
	Phase 1 - 41 site inspections completed
Sat, Sept 2	Brio Refining; Conroe Creosoting Company; Dixie Oil Processors; Harris (Farley St.); Hart Creosoting; Jasper Creosoting; Many Diversified Interests; Palmer Barge Line; State Marine of Port Arthur; Tex-Tin Corp; United Creosoting; American Creosote Derivder; EVR-WOOD Treating Evangeline Refining; SBA Shipyard
Personnel: 104	NPL Sites completed
Expended Funds: \$1,759,127.00	FEMA approved the State of Texas' request to amend the cost waiver for response effort funding
	FEMA's JFO opened (R6 has two liaison stationed at JFO in Austin, TX
Sun, Sept 3	Arkema: 3 of the 9 trailers self-ignited
Personnel: 145	TCEQ sent 4 teams to survey Beaumont area (GW plant remains off-line due to flooding conditions; SWP producing 20 MGD)
Expended Funds: \$2,537,744.00	State of Louisiana received an Emergency Declaration (FEMA-3382-EM)
Mon, Sept 4	Corpus Christi Discharge Assessment Team 1 observed an ongoing release of natural gas at the S. Mustang Separation Facility
MA: 03-02	EPA's aerial reconnaissance aircraft continues to fly over the Arkema facility "every 10 to 15 min
	Responsible party in consultation with UC decided to manually ignite the remaining peroxide trailers
	1.5 evacuation radius remains in effect
	PIO mobilized to the Houston Mayor's Office to began operating out of the Houston Emergency Center
	Geneva Industries/Fuhrmann Energy; Sheridan Disposal; Ruston Foundry NPL Sites Completed
MA: 03-02	Amendment #2: Amend to change Federal cost share to 100% per FRM #4 of the Presidential Declaration (\$8,592,000)
Personnel: 163	Staging area secured at Beaumont Branch
Expended Funds: \$2,692,902.00	Field response activities continue at CTX and HTX branches; focus changes from assessment to recovery
	Remaining peroxide trailers at the Arkema facility were manually ignited in a controlled method
	Multiple Superfund Phase 2 Site inspections are planned; One Superfund Phase 2 inspection completed
	Acting Regional Administrator and advisors to the Administrator met with Houston Mayor/Local and state officials
	Acting Regional Administrator and advisors will be touring NPL sites with reporters from national media outlets; attending Congressional briefing later today
	EPA issued joint statement with TCEQ about controlled burn at Arkema facility; Crosby Volunteer FD/Harris County Fire Marshall's Officer performed burn
	EPA's TAGA bus along with EPA personnel arrived in Houston
	EPA Team began mobile air monitoring in the Manchester Community (Houston Branch); 6 locations monitored
	Pre-sampling of staging areas completed in CTX branch
	Total of 73 orphan containers have been collected to date
	President approved the additional of 7 more counties (Austin, Bastrop, DeWitt, Gonzales, Karnes, Lavaca, and Lee) to Disaster Declaration; total # of counties on the Presidential Disaster Declaration: 39
Tues, Sept 5	French LTD; Highlands Acid Pit; Malone Services Company; Patrick Bayou; Petro-Chemicals Systems;
MA: 01-01	Amendment #1: Amend 4332DR-TX-EPA-01 for additional funds for additional personnel at State EOC/JFO at request of FEMA IMT and extension of coverage from original MA (\$275,000)
Personnel: 157	EPA Liaison embedded with Houston Mayor's Office; toured 3 Superfund sites and briefed Senator John Cornyn's office
Expended Funds: \$3,496,641.00	EPA Ronnie Crossland, Senior Liaison will join TCEQ Chairman Shaw for briefing with Gov. Abbott; RA Coleman will join by telephone
	Acting Regional Admin., Chairman of TCEQ and Special Advisors will brief Mayor today.
	EPA demob. From Arkema site
	Acting Regional Admin. To visit the HTX command post today
	EPA TAGA to conduct air mon. in southeast Houston around the Valero Refinery
	EPA to host call with Environ. Justice contacts in TX and LA.
	TCEQ operations were turned back over to the TCEQ regional office
	Total of 86 containers collected to date
	EPA providing support to TCEQ for DW/WW system assessments
	Houston Magellan facility cleanup completed (product outside of contaminant)
Wed, Sept 6	10,000 gallons of petroleum were removed at Signet Enterprise vessel located at Aransas Pass (addressed by Responsible Party with EPA oversight); 45,000 gallons of petroleum removed overall
Personnel: 189	TX Gov. Abbott plans to travel to CTX, HTX, Victoria, Fort Bend County and Beaumont Tues-Sat; EPA Sam Coleman has been invited and will accompany the Gov. on Thurs and Fri; Kell Kelly will accompany Gov. on Sat.
Expended Funds: \$3,782,429.86	EPA completed tours areas impacted by storm; Kell Kelly will join JFO in Austin on Thursday as EPA's Senior Fed. Official
	EPA has begun deploying community liaisons to serve in EOCs
	EPA coordinating with USCG on a 2500-gallon fuel oil spill at Houston Magellan facility (product outside of the cont. area is being collected)
	EPA assisted TCEQ by conducting site inspections at 2 State Superfund Sites
	EPA Remedial Manager onsite and overseeing at San Jacinto Waste Pits Superfund Site
	EPA issued statement on the assessment of Valero Houston Refinery (confirmed that a tank at facility did have a leak which occurred on 08/26/2017 from Harvey storm and flooding)
	Total of 91 containers collected to date
	EPA has granted all open fuel waivers requested to date
	43 Federal Superfund Sites in the affected area have been assessed; 41 sites have been cleared
Thurs, Sept 7	San Jacinto Pits and US Oil Recovery are the 2 remaining NPL sites that require additional follow up
Personnel: 197	Gov. Abbott will hold a press conference at 10 am this morning. EPA Acting RA Colemand will participate
Expended Funds: \$5,210,967.68	EPA completed 50 DW and WW systems on-site assessments
	EPA recovered 5 hurricane-damaged containers in the CTX area; 96 containers collected to date
	In partnership with TCEQ and USCG, EPA has completed post-hurricane environmental damage assessments in 4 counties (Liberty, Austin, Waller, and Chambers)
	19 community liaisons have been deployed to HTX
	EPA to begin post-hurricane conf. sampling at 34 NPL Superfund sites in TX today
	Houston Mayor announced city dept. are resuming normal business hours and operations
	EPA Dive Team has been deployed to oversee PRP act. At the San Jacinto Superfund Site
	Aerial Insecticide spraying began over Refugio and Bee counties
Fri, Sept 8	Gov. Abbott announced John Sharp as Commissioner for the Commission to Rebuild Texas; asked all State and Federal Agencies to work together to expedite cleanup and cut red
Personnel: 198	TCEQ and EPA have completed 6,853 DW facilities and 2,908 WW facilities in the impacted areas.
Expended Funds: \$5,210,967.68	TCEQ will expand to 24-hour operations; R6 staff added to SOC
	EPA to use insecticides containing "Naled" to spray for mosquitos
	EPA will publicly release flood water and ASPECT air data from the Arkema fires. EPA will release TAGA air mon. data from Manchester neighborhood
	EPA ordered Arkema to provide a detailed timeline of events of how they plan to handle organic peroxides
	EPA received notifications from 8 companies covering 12 LA/HTX Gulf facilities that impending storms may cause a delay or impediment to perf. Complying w/provisions of their Consent Decrees
	PSHMA has issued an emergency waiver order to assist EPA's efforts to remove, transport and dispose of haz. Mat. As part of Harvey
	Senate Environment and Public Works Comm. Submitted a request for information on Arkema
	R6 activated the Texas Poison Control Center Network
	Total of 106 containers collected to date
	Texas Dept. of Agri. Signed pesticide applicator certification waivers for DDO
	EPA (R6) deployed 4 air quality tech. specialists to HTX
Sat, Sept 9	
MA: 03-03	Amendment #3: Amend to obligate an additional \$1,500,000 to the original Mission Assignment to continue ESF-10 in the impacted areas, including the expanded areas since the initial Mission Assignment (\$10,092,000)
Personnel: 198	Office of Emergency Management Director Reggie Cheatham and Jodi Beringer, OMB Budget Manager will visit REOC and ASPECT aircraft.
Expended Funds: \$5,796,955.61	NASA SMO/Earth Science is preparing to send the DC-8 to spend several hours in southern TX sampling atmospheric trace gases and aerosols
	Gov. Abbott traveling to Beaumont today and accompanied by Kell Kelly
	EPA, by letter concurred State of TX use of its emergency hurricane debris management guidance
	Gov. Abbott sent letter to Admin. Pruitt encouraging support for the TX Water Development Board's request flexibility in allowances and procedural changes in the State Revolving Loan Fund program
	DFW-based Fruit of the Earth product currently under a stop sale order by the EPA
	EPA received 17 notifications of the force majeure claims from companies covering TX/LA
	TCEQ has invited EPA and Harris County Pollution Control Agency to part. in a Hurricane Harvey Update for environmental advocacy organizations
	EPA's TAGA mobile laboratory is currently non-operational due to a tech. malfunction
	Corpus Christi: Oversight of fuel transfer of Signet Enterprise (total of 79,000 gallons being transferred to date)
	Total of 113 containers collected to date
	EPA extended the current multi-state fuel waiver to 09/26/2017
Sun, Sept 10	Reggie Cheatham and OMB Budget Manager Jodi Beinger will visit the REOC and ASPECT aircraft during scheduled maintenance in Addison today
Personnel: 234	Monitoring teams identified elevated readings of VOCs in the area between Pasadena Refining Systems, Inc. and Kinder Morgan's Pasadena Terminal near Houston Ship Channel
Expended Funds: \$5,796,955.61	EPA confirmed 21 out of 39 disaster declaration counties currently providing private well testing for area residents; EPA assessing if remaining 18 counties need additional support
	EPA shared approved fact sheets from TCEQ/EPA for returning residents to over 5,000 local, state, tribal and industry partners
	HTX/Beaumont/Port Arthur to begin collection of staging of recovered orphan containers this week
	EPA received an amendment to Mission Assignment 4332DR-TX-EPA-03 for an increase of an additional \$1.5 million
	Joint news release from EPA/TCEQ was issued updating the public on the Hurricane Harvey overall response
	DTX REOC staffed with Debris Management Tech. Expert (member of FEMA Debris Task Force)
	4 EPA Air Quality tech. specialist deployed to HTX conducted total VOCs area monitoring in the Ship Channel area.
	Total of 136 containers collected to date
Mon, Sept 11	EPA assigned RSF Coordinator to participate in the Regional Interagency Recovery Meeting at JFO
Personnel: 245	Reggie Cheatham, Carl Edlund, Dan Opsitaki and Jodi Beringer will tour EPA's command post, Houston Laboratory, the TAGA mobile lab. And the San Jacinto Waste Pits
Expended Funds: \$6,067,185.41	EPA Environ. Justice Director Arturo Blanco traveling to Houston/Galveston

	Community Liaisons (CLs) assisting citizens of impacted counties
	HTX/Port Arthur/Beaumont to begin collection of orphan containers
	Total of 136 containers collected to date
Tues, Sept 12	
MA: 01-02	Amendment #2: Amend to change Project end Date to 09/30/2017 and change Project Manager to Jason Burroughs (\$275,000)
Personnel: 244	EPA Environ. Justice Director Arturo Blanco traveling to Port Arthur
Expended Funds: \$6,241,621.21	EPA/TCEQ meeting with environmental advocates in Austin
	EPA completed review of the TWD Board's request to address damage by the hurricane
	EPA confirmed that private well testing is available to residents
	FEMA requested that EPA provide a debris management expert at the JFO
	EPA will begin sampling of the 9 Superfund sites in LA
	ASPECT has completed flight operations for this response; demob in 2 days; available for Hurricane Irma operations
	Hurricane Harvey Story map is final
	Total of 218 containers collected at sites
Wed, Sept 13	EPA to complete sampling of the 34 Superfund sites in TX
Personnel: 251	All 3 branches are recovering and staging orphan containers
Expended Funds: \$5,060,899.57	Anuro Blanco traveling to the Alabama-Coushatta tribe today
	EPA/TCEQ issued a joint news release updating the status of the water systems
	Vector Control: DOD aerial assets sprayed 199,190 acres in Orange, Jefferson, and portions of Chambers Counties
	Total of 297 containers collected at sites
	EPA receives report from PCI Nitrogen in Pasadena, TX
	ASPECT completed flight operations; total of 134 RMP, 456 drinking water; 105 WW facilities were surveyed
Thurs, Sept 14	Governor Abbott is expected to visit FEMA JFO in ATX
Personnel: 263	EPA concluded probable source of benzene and VOC readings in Manchester was the roof failure and spill from a light crude storage tank at Valero Houston Refinery
Expended Funds: \$5,395,063.09	Total of 448 containers collected at sites
Fri, Sept 15	EPA/TCEQ field observation teams will observe debris staging and landfill operations to ensure best practices/program requirements are met
Personnel: 262	DW/WW teams completed their emergency assessments of community water systems and will demob. Today, 625 DW and 441 WW assessments were performed
Expended Funds: \$5,702,062.84	EPA's drive team will collect samples at San Jacinto waste pits Superfund site
	EPA issued a news release announcing that Pruitt approved a request from the State of TX to continue to waive requirements for fuels in TX through 10/1/2017
	The issuance of a Recovery Mission Assignment to EPA has been placed on hold; R6 Recovery Coordinator demob from the JFO yesterday
	EPA issued NAA Extensions to TCEQ on Loading of Tank Fuel Trucks at Petroleum Distribution Terminals, Landing Roofs on Gasoline Storage Vessels, and the Use of Vapor Recovery Systems
	Total 517 containers collected at sites
Sat, Sept 16	Multi-state waiver expired
Personnel: 258	EPA receives a report on 9/15/17 at 9:30 pm of a fire at Enterprise Products facility in Mont Belvieu, TX. TAGA monitored facility and was informed the fire was Butane associated with a degasses unit
Expended Funds: \$6,594,378.76	DW/WW assessment teams completed their emergency assessments of community water systems and demob. On 9/15/17, 625 DW and 441 WW assessments were performed
	TAGA conducted air monitoring assessments in areas near 6 industrial facilities (Baytown, Mont Belvieu, Channelview, and Pasadena) TAGA is not monitoring today (9/16/17)
	TCEQ requesting FEMA to increase EPA's ESF-10 Mission Assignment by \$8.3 million in stages
	EPA provided a No Action Assurance (NAA) for the import of 235 power generators by the Yamaha Motor Corporation
	EPA will not pursue enforcement actions against tanker trucks for certain provisions for the CAA and parallel TX regulations that relate to tank tightness and registration for tanker trucks
	Total 591 containers collected at sites
Sun, Sept 17	DOD has completed 50% of its mission-assigned spray operations
Personnel: 240	Total 657 containers collected at sites
Expended Funds: \$6,845,204.89	
Mon, Sept 18	
MA: 03-04	Amendment #4: Amend to obligate an additional \$2,100,000 change project end date to 09/21/2017 and change Project Manager to Jason Burroughs (\$12,192,000)
Personnel: 223	Reconnaissance/Orphan container recovery activities are complete in the Corpus Christi Branch; last container on staging pad will be transferred to the Houston Branch today
Expended Funds: \$7,083,209.13	Corpus Christi Branch has transitioned all assessment and recovery operations to the TCEQ Regional Office and are closing this operation
	Total 716 containers collected at sites
	TAGA Team 1 conducted monitoring of neighborhoods and areas in Victoria, TX
	TAGA Team 2 conducted air monitoring of neighborhoods and areas in Port Arthur, TX
Tues, Sept 19	
Personnel: 219	Representatives from US Representative Culberson's (7th District TX) visited Houston Branch yesterday
Expended Funds: \$7,320,171.32	State cost-share increases to 10% match (from zero) for response activities
	ASPECT and PHILUS have been demobilized
	EPA to host its weekly Hurricane Harvey update conference call with environmental justice advocates
	Arkema requested a 90-day extension to EPA's information request for info. Related to their facility. EPA will grant 30-day extension
	To date, 2,064,303 acres have been treated by DOD
	Total 953 containers collected at sites
	Two TAGA air monitoring teams monitored neighborhoods and areas near 13 facilities in CTX and Beaumont yesterday
Wed, Sept 20	FEMA issued an increase in EPA's ESF-10 NAA to \$2.1 million
Personnel: 232	FEMA informed EPA that state cost-share increase to 10% is effective at midnight on Thursday. EPA is adjusting demobilization schedules
Expended Funds: \$5,963,898.66	EPA responded to a large tank fire at the Valero Port Arthur Refinery in Port Arthur, TX
	Paul Ryan to visit the Houston Branch either today or tomorrow
	CTX/Port Arthur/Beaumont Branches have transitioned all future assessment and recovery operations to the TCEQ Regional Offices and are sampling and dismantling pads